



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/639,677	08/13/2003	Fernando Cuervo	3444-Z	6127

7590 10/17/2007  
Law Office of Jim Zegeer  
Suite 108  
801 North Pitt Street  
Alexandria, VA 22314

EXAMINER

SURVILLO, OLEG

ART UNIT	PAPER NUMBER
----------	--------------

2142

MAIL DATE	DELIVERY MODE
-----------	---------------

10/17/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/639,677

Applicant(s)

CUERVO ET AL.

Examiner

Oleg Survillo

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Response to Amendment***

1. This Action is responsive to the amendment filed on July 31, 2007. Claims 1-16 are pending in the application. Claims 1, 2, and 9 are amended herein. No new claims have been added. No claims have been cancelled.

### ***Response to Arguments***

2. With regard to the Applicants' remarks filed on July 31, 2007:

Regarding the rejection of claims 1, 3-7, and 9-10 under 35 U.S.C. 102(e) as being anticipated by Law, and subsequently, regarding the rejection of claims 2 and 11-16 under 35 U.S.C. 103(a) as being unpatentable over Law in view of Gibson et al. and claim 8 under 35 U.S.C. 103(a) as being unpatentable over Law in view of RFC 3084 by Network Working Group, Chan et al., Applicants' arguments have been fully considered but they are not persuasive.

Applicants argued with respect to the teaching of Law that "*the PEP must be configured for interworking with the respective PDP, before it enters the network*". This argument is moot since it is not clear how it related to any of the claims 1-16. Applicants further argued: "the PEPs do not accept policy rules from different PDPs". This argument is not persuasive. Law shows (par. [0050], Fig. 3) that PDPs (310a) and (310b) are capable of pushing the policy rules to PEAs (308a), (308b), and (308c), which in turn push the policy rules to respective PEPs in each domain.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 3-7, and 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Law (2004/0039803).

As to claim 1, the “whereby” clause represents a functional language that does not further limit the structure and, therefore, is not given a patentable weight. See ***MPEP 2111.04***

As to claim 1, Law shows an apparatus for establishing services that utilize policy-enabled resources in a communications network (Fig. 3), comprising:

a first policy enforcement point (PEP) (212, Fig. 2) for identifying policy-enabled resources that are available and allocating requested policy-enabled resources to services [locally consolidating and analyzing the network conditions to perform network actions] (par. [0037] lines 11-14);

a first network resource controller (NRC) for requesting from available policy-enabled resources any policy-enabled resources required to establish a particular service [a Policy Enforcement Agent (PEA) (208, Fig. 2) that performs a network resource management] (paragraphs [0055] and [0057]);

Art Unit: 2142

a first resource policy layer (RPL) for provisioning, to a service being established, the policy-enabled resources allocated to that service [a Policy Server (204) that includes a Policy Decision Point (PDP) (210 Fig. 2) that validates and pushes the requested policy rule to a PEP (212)] (par. [0036] lines 7-11).

As to claims 3 and 10, Law shows that the communications network comprises a plurality of domains [administrative sub-domains (301a, 301b, and 301c Fig. 3)], each of the first PEP, first NRC, and the first RPL may be associated with any one of the domains (Fig. 3).

As to claim 4, Law shows the communication network comprising a plurality of domains [administrative sub-domains (301a, 301b, and 301c Fig. 3)], the apparatus further comprises a second PEP associated with a different domain than the first PEP [network node (311b) and (311c) each comprising PEP and associated with different domains] (Fig. 3).

As to claim 5, Law shows the communication network comprising a plurality of domains [administrative sub-domains (301a, 301b, and 301c Fig. 3)], the apparatus further comprises a second NRC associated with a different domain than the first PEP [PEA (308b) associated with different domain (301b) than the first PEP belonging to domain (301a)] (Fig. 3).

Art Unit: 2142

As to claim 6, Law shows the communication network comprising a plurality of domains [administrative sub-domains (301a, 301b, and 301c Fig. 3)], the apparatus further comprises a second RPL associated with a different domain than the first PEP [PS (304b) associated with different domain (301b) than the first PEP belonging to domain (301a) and associated with PS (304a)] (Fig. 3).

As to claim 7, Law shows that each RPL comprises one or more PDPs [a Policy Server (204) having at least one PDP (210)] (Fig. 2).

As to claim 9, the "whereby" clause simply expresses the intended result of process steps positively recited that does not further limit the structure and, therefore, is not given a patentable weight. See ***MPEP 2111.04***

As to claim 9, Law shows a method of establishing services that utilize policy-enabled resources in a communications network (par. [0012]), comprising:

identifying, at a first policy enforcement point (PEP) [(212, Fig. 2)] policy-enabled resources that are available and allocating requested policy-enabled resources to services [locally consolidating and analyzing the network conditions to perform network actions] (par. [0037] lines 11-14);

requesting, from available policy-enabled resources at a first network resource controller (NRC) any policy-enabled resources required to establish a particular service [a Policy Enforcement Agent (PEA) (208, Fig. 2) that performs a network resource management] (paragraphs [0055] and [0057]); and

Art Unit: 2142

provisioning, to a service being established at a first resource policy layer (RPL), the policy-enabled resources allocated to that service [a Policy Server (204) that includes a Policy Decision Point (PDP) (210, Fig. 2) that validates and pushes the requested policy rule to a PEP (212)] (par. [0036] lines 7-11).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Law in view of Gibson et al. (2002/0085559).

As to claim 2, Law shows all the elements except for the first PEP comprising a plurality of virtual PEPs, each virtual PEP being associated to a respective service.

Gibson shows that the first PEP [a Virtual Switch Control Function (VSCF)] comprises a plurality of virtual PEPs wherein each virtual PEP being dynamically associated to a respective service [VSCF being able to support multiple reference points for policy control to be controlled by multiple PDPs for different aspects of policy] (par. [0034], [0042], Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Law by having a plurality of virtual PEPs in order to

Art Unit: 2142

allow PEP to be controlled by multiple PDPs for different aspects of policy (par. [0042] in Gibson).

As to claims 11 and 12, Law shows that PEP is provisioned to provide resource services [having a Policy Decision Point (PDP) (210, Fig. 2) that validates and pushes the requested policy rule to a PEP (212)] (par. [0036] lines 7-11).

Law does not show having virtual PEPs of a main PEP.

Gibson shows that the main PEP [a Virtual Switch Control Function (VSCF)] comprises virtual PEPs wherein each virtual PEP being associated to a respective service [VSCF being able to support multiple reference points for policy control to be controlled by multiple PDPs for different aspects of policy] (par. [0042]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Law by having virtual PEPs in order to allow PEP to be controlled by multiple PDPs for different aspects of policy (paragraph [0042] in Gibson).

As to claim 13, Law shows having separate PEPs, each from a different domain, being provisioned to the same service by a PDP [having PDPs 310a and 310b each validating the request and pushing the policy rule to PEAs for policy enforcement by PEPs] (par. [0050], Fig. 3).



Art Unit: 2142

As to claim 14, Law shows two separate PEPs, each from a different domain, are provisioned to the same service by a PDP [having PDPs (310a) and (310b) each validating the request and pushing the policy rule to PEAs for policy enforcement by PEPs] (par. [0050], Fig. 3).

As to claim 15, Law shows that the PDP is in one of the two domains [PDP (310a) servicing first domain (301a)] (Fig. 3).

As to claim 16, Law shows that the PDP is in a third domain] PDP (310a) servicing third domain (301c)] (Fig. 3).

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Law in view of RFC 3084 COPS Usage for Policy Provisioning (COPS-PR) by Network Working Group, Chan et al.

As to claim 8, Law shows all the elements except for resource capability information descriptors being used for resource discovery and policy provisioning between entities.

Chan shows that resource capability information descriptors [REQ and DEC messages] are used for resource discovery and policy provisioning between entities (page 3, COPS provisioning model, 3.1-3.2 REQ and DEC pages 7-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Law by having resource capability information

Art Unit: 2142

descriptors used for resource discovery and policy provisioning between entities in order to utilize COPS protocol for policy outsourcing and policy provisioning in communication between entities (par. [0004], lines 18-21 in Law).

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oleg Survillo whose telephone number is 571-272-9691. The examiner can normally be reached on M-Th 7:30am - 5:00pm; F 7:30am - 4:00pm EST.

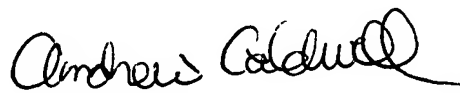
Art Unit: 2142

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Oleg Survillo

Phone: 571-272-9691

A handwritten signature in black ink, appearing to read "Andrew Caldwell", with a stylized flourish at the end.

ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER